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FAMILY BUDGETS AND WAGES

Since the days of LePlay and Engel there have been recurrent waves of interest in collecting and analyzing family budgets. The cost and standard of living have been studied in connection with investigations of factors entering into international trade;¹ to determine the living conditions of wage-earners;² to provide standards of normality for the administration of poor relief;³ as companion studies to wages investigations;⁴ and to secure a basis for the establishment of minimum wage rates.⁵ The earlier studies were made on broad lines and such conclusions as were drawn were usually qualified to safeguard their specific use. Many of them were incidental to more comprehensive investigations of trade or social conditions. The later studies were often made for the express purpose of affording a basis for settling wage disputes. From the early investigations of expenditures and of goods consumed

¹ Massachusetts. Bureau of Statistics of Labor, *Sixth Annual Report* (1875), pp. 189-450; United States. Commissioner of Labor, *Sixth Annual Report* (1890), part III; *ibid.*, *Seventh Annual Report* (1891), vol. 2; Great Britain. Board of Trade, *Cost of Living in American Towns* (London, 1911).

² Charles Booth, *Life and Labour of the People in London* (1902), vol. I, pp. 130-146; B. Seeböhm Rowntree, *Poverty: A Study of Town Life* (1901), chs. VIII-IX; United States. Commissioner of Labor, *Eighteenth Annual Report, Cost of Living and Retail Prices of Food* (1903); Louise B. More, *Wage-Earners' Budgets* (1907); United States Bureau of Labor, *Report on Condition of Woman and Child Wage-Earners in the United States*, vol. XVI, *Family Budgets of Typical Cotton Mill Workers* (1911); United States Bureau of Labor Statistics, "Cost of Living in the United States," *Monthly Labor Review*, May, 1919, and succeeding months; *ibid.*, "Cost of Living in the District of Columbia," *Monthly Review of the U. S. Bureau of Labor Statistics*, Oct., Nov., Dec., 1917; Margaret F. Byington, *Homestead: The Households of a Mill Town* (1910); National Industrial Conference Board, *The Cost of Living Among Wage-Earners, Fall River, Mass.*, Research Report No. 22 (1919); *Lawrence, Mass.*, Research Report No. 24 (1919); *North Hudson County, N. J.*, Special Report No. 7 (1920); *Greenville and Pelzer, S. C., and Charlotte, N. C.*, Special Report No. 8 (1920); *Cincinnati, Ohio*, Special Report No. 13 (1920); *Worcester, Mass.*, Special Report No. 16 (1920); Little and Cotton, *Budgets of Families and Individuals in Kensington, Philadelphia* (1920).

³ Robert C. Chapin, *The Standard of Living in New York City* (1909).

⁴ J. C. Kennedy, *Wages and Family Budgets in the Chicago Stockyards District* (1914); United States. Railroad Administration, *Report of the Railroad Wage Commission to the Director General of Railroads*, April 30, 1918.

⁵ State of New York. *Factory Investigating Commission. Fourth Report* (1915), vol. IV, pp. 1461 ff.; New York City, *Board of Estimate and Apportionment. Report on the Cost of Living for an Unskilled Laborer's Family in New York City*, submitted by the Bureau of Standards to the Committee on Salaries and Grades (1915); *ibid.*, *Report on the Increased Cost of Living for an Unskilled Laborer's Family in New York City*, prepared by the Bureau of Personal Service, 1917; Dallas Wage Commission, *Report of Survey Committee* (1917); Bureau of Municipal Research of Philadelphia, *Workmen's Standard of Living in Philadelphia* (1917).

by actual families the content of a fair minimum standard of living for a given group of wage-earners in a given locality was frequently developed, and the probable cost of maintaining it was roughly worked out from budgets of those families studied who met certain objective tests of adequacy of food, housing, clothing, and other necessary items. A number of the later studies aimed to establish an ideal standard and did not purport to be a measure of the prevailing cost of living.

So far as is known, up to the period of the world war, no extensive use was made in this country of family budgets for the purpose of adjusting wage rates, although they were often used by relief agencies as a criterion of the support being given to dependent families.⁶ In 1915, however, a study of the cost of living on the budgetary plan was made specifically for the purpose of establishing rates of wages for unskilled laborers in the employ of the city of New York.⁷ In 1917 and succeeding years a number of studies of the cost of living were made for use in wage arbitrations.⁸ Cases coming before the National War Labor Board were frequently decided on the basis of budgetary studies of the cost of living; and in 1920 the settling of important street railway disputes, of the demands of the railroad employees and of the miners in both the bituminous and the anthracite fields turned largely upon the accuracy of cost of living figures introduced as evidence.

In estimating the minimum cost of maintaining a fair standard of living in this country it has usually been considered not enough to accept the average of what families actually are spending, since the standard at which they live may be deficient at one or more points. Moreover, comparisons are not possible unless all are related to the requirements of families having the same or similar attributes. In practice, therefore, the needs of a family of five persons, as determined either by expenditures of actual families who met certain standards or by theoretical considerations of what such a family required, have been the basis of estimates of the minimum cost of living. Originally this family of five and its needs seems to have been regarded as a convenient measuring unit only, and where used in case work by charitable societies the requirements of families of varying sizes have been estimated

⁶ Budgets for single wage-earning women have, however, been the basis of adjusting rates in those American states having minimum wage laws, and in England, Australia, and New Zealand, the cost of living of families is at the basis of prevailing wage legislation.

⁷ *Report on the Cost of Living for an Unskilled Laborer's Family in New York City*, op. cit.

⁸ Bureau of Applied Economics, Inc., *Standards of Living*, revised edition, Bulletin No. 7 (1920), pp. 48-63; 92-95; 96-101; 115-117; National War Labor Board, *Memorandum on the Minimum Wage and Increased Cost of Living* (Washington, 1918).

from those of the type family. When, however, the cost of living came to be used in establishing wage rates, the problem assumed a very different aspect. Individual families were no longer dealt with, but the standard and cost of living had to be established for groups of persons without opportunity for adaptation to individual cases.

The use of budgetary studies in case work presents no serious difficulties since standards for families of any size and composition can readily be worked out from standards set for the family of five persons. In wage arbitrations the needs of this same family of five have likewise been taken as a measure of costs with little or no attempt to verify their applicability to the groups under consideration. Such changes as have been made in family budgets, where these have been used for settling wage disputes, have been with regard to the standard of living and not to the type family to which this standard should apply.

The present paper deals with some of the questions which have arisen from trying to use family budgets in adjusting wage rates; it attempts also to indicate to what extent the family of five where the father's earnings are the only source of income is representative of all wage-earner's families.⁹

The Minimum Standard of Living

The matter of family budgets in relation to wages was undoubtedly considered by the United States Anthracite Coal Commission of 1920 more carefully than it has ever been considered by any other such tribunal. Sixteen budgetary studies were introduced in evidence at the hearings before this commission in July, 1920, and the whole theory of the cost of living in relation to wages was discussed in great detail. The argument was somewhat as follows:¹⁰

The principle that wages should merely keep pace with the cost of living was a wartime measure only, to be abandoned now in favor of a new principle which must be adopted as the true basis for wage adjustments. This principle is designed to prevent the "free and relentless play of the forces of supply and demand in fixing wages" and recognizes "that every wage-earner is entitled to a living wage. By a living wage is meant not merely a subsistence rate of pay, but a wage sufficient, after meeting the minimum physical needs of food, clothing and shelter to yield a balance sufficient for a small degree of comfort and to enable

⁹ A report soon to be issued by the National Industrial Conference Board will present in detail a critical analysis of the budgets noted in the present paper.

¹⁰ Before the United States Anthracite Coal Commission, *Summary, Analysis and Statement*, presented by W. Jett Lauck on behalf of the United Mine Workers of America (Washington, 1920), pp. 5 ff. This argument has been used in greater or less detail at most of the wage arbitrations in the United States since 1918.

the wage-earner to secure some reasonable measure of health, recreation and education."¹¹

Hitherto accepted concepts of a fair minimum standard of living were abandoned and in place of the budgets developed by Chapin in 1907, by the New York State Factory Investigating Commission in 1914, and by other students of the standard of living of wage-earners' families, which up to the period of the war had been generally accepted as an adequate measure of the goods and services necessary for the maintenance of a minimum American standard of living, there were offered a new series of budgets developed since 1917, and designed to provide for a standard somewhat above this which is now called a "subsistence level."

The anthracite operators on their part stated at the beginning of the hearings that "so far as the principle of a living wage is concerned, there is no issue between the operators and the miners. The difference consists in what constitutes a living wage and on that experts disagree."¹² They pointed out that the budgets offered by the mine workers as evidence of the cost of living were not for families living in the anthracite region. "No method of determining the specific requirements for a healthy and decent standard of living is practicable," they maintained, "unless it gives due recognition to actual local conditions."¹³ "The only fair and practical test of the wage status of employees in a given industry is an examination of facts bearing upon the general prosperity of the employees where the industry is a dominating one. A living wage is not a definite sum of money."¹⁴ Whether an industry is paying a living wage "can be learned, not by theoretically constructed family budgets, that do not fit the locality under consideration, but by examining the effect of the existing wage scale upon the community."¹⁵ They then cited the prevailing prosperity in the anthracite region and the great increase in savings banks deposits within the last few years.¹⁶

¹¹ *Ibid.*, p. 6.

¹² United States Anthracite Coal Commission. Second Day, *Stenographic Transcript*, p. 323.

¹³ Before the United States Anthracite Coal Commission, *Exhibits of the Anthracite Operators in Reply to Exhibits Presented by the Anthracite Mine Workers*, (Scranton, Pa., July, 1920), Exhibit No. 12, p. 7.

¹⁴ *Ibid.*, p. 18.

¹⁵ *Ibid.*, p. 19.

¹⁶ Operators Exhibit No. 4; *ibid.*, No. 12, p. 19; United States Anthracite Coal Commission. Sixth Day, *Stenographic Transcript*, pp. 904 ff. One of the strong points made by the company in the arbitration of wages between the Boston Elevated Railway Company and its employees in the spring of 1920 was that the wages paid their men must be sufficient and as good as those paid in other industries, else with the unprecedented opportunities for employment in other occupations there

The problem as to what constitutes a fair minimum standard of living resolves itself, therefore, from the point of view of wage adjustments into three successive questions:

(a) Can the adequacy of wage-earners' incomes be measured by budgetary standards at all?

(b) If so, must local studies always be made to establish local conditions, or

(c) Can studies of standards and costs, made in one locality, be used as a measure of standards and costs in another?

The answer to these questions is not simple. While pragmatic tests of adequacy may seem to justify an existing wage scale, they afford no means of establishing a new scale or of revising one which may appear to be inadequate. On the other hand, the construction of budgets which will fairly represent the minimum requirements of American workingmen's families involves much guess work on the part even of those who are most thoroughly equipped to determine, by such objective tests as are possible, requirements of food, house room, clothing, and other items in the family budget.

Up to the time of the war, the budgets collected by Chapin and by other students of budgets which are now described as representative of "*a bare subsistence level* of physical needs only—food, fuel, clothing and shelter" which "provides for a subsistence only just above a *poverty level*, and makes no provision whatsoever for comfort, health, savings, recreation or amusement,"¹⁷ were generally accepted as a fair measure of the minimum standard of living. Nearing, for example, in 1913 mentioned these budgets as affording "to a family what might be described as the decencies of modern American life. Practically no luxuries are allowed, but the minimum comforts are provided and all of the strict necessities of life are made possible."¹⁷ Lauck's study of the sum necessary in 1915 for the maintenance of "a fair minimum of decent, healthful and tolerable living," was based on the budgets collected by Chapin, More, Byington, Kennedy, and on the reports of the New York State Factory Investigating Commission and the New York City Bureau of Standards.¹⁹ Streightoff, in his analysis of the standard of living among the industrial people of America²⁰ and in his re-

would have been a high labor turnover whereas, in fact, almost no men had left the company and there was a waiting list of applicants for employment.

¹⁷ *Summary, Analysis and Statement, op. cit.*, p. 17. Italics appear in the original.

¹⁸ Scott Nearing, *Financing the Wage-Earner's Family*, p. 79.

¹⁹ W. J. Lauck and E. Sydenstricker, *Conditions of Labor in American Industries*, pp. 367 ff.

²⁰ Frank Hatch Streightoff, *The Standard of Living among the Industrial People of America*, 1911, chs. II and XI.

port on the cost of living in New York State in 1914,²¹ accepted existing budgets as a measure of a "decent livelihood" and based his own theoretical budget largely upon Chapin's study made several years before.²²

However low may be the standard of living portrayed in these budgets they are not representative of "bare subsistence." This is indicated by a study of the percentage of all expenditures available for sundries. In a period when average wage-earners' families were spending about 20 per cent of their incomes for sundries,²³ within which group lies the greatest margin for expenditures not absolutely essential, Mrs. More's families were spending 21.5 per cent; Chapin's \$800-\$900 income families averaged 16 per cent; Kennedy's families averaged 15.1 per cent; Streightoff allowed 21.8 per cent in New York City and 24.8 per cent in Buffalo in the ideal budgets which he worked up for the New York State Factory Investigating Commission in 1914. These included allowances for recreation and amusement, doctor and medicine, insurance, church, union and lodge dues, carfare, and miscellaneous expenditures. While in no case was the outlay for these items large or even liberal, such budgets can scarcely be spoken of as "sufficient only for meeting the animal needs for food, clothing, and shelter."²⁴

These early budgets were designed to meet minimum requirements only. As such they were based on the expenditures of those families which were maintaining a fair standard of living on the smallest possible sum; or where, as in the case of the investigation for the New York State Factory Investigating Commission or the New York City Board of Estimate and Apportionment, prices were collected and theoretical budgets, subjected to objective tests of sufficiency, were used, the aim was to establish the lowest standard consistent with suitability for American workmen. They represent, therefore, minima above which expenditures might rise as increased incomes permitted, but below which they might not fall without the sacrifice of something essential.

The attempt to revise the earlier concept of a minimum standard of living and to establish in its place one which would permit certain additional comforts was an outgrowth of the use of budgetary studies in wage arbitrations. It is the result of a desire to get away from the needs of the lowest grade, unskilled workers whose wages and cost of living represent the minimum from which all workers are to be graded

²¹ *Report of the Factory Investigating Commission, op. cit.*, pp. 1625 ff.

²² Streightoff criticized the Chapin budget at some points and his own budget allowed \$51 more to make up these deficiencies. *The Standard of Living, op. cit.*, p. 162; *Report of the Factory Investigating Commission, op. cit.*, pp. 1668 ff.

²³ *Eighteenth Annual Report of the Commissioner of Labor, op. cit.*, pp. 593, 648.

²⁴ *Summary, Analysis and Statement, op. cit.*, p. 17.

up, and is an attempt to estimate the standard of average or high-grade workers. Dr. Peixotto, for example, in describing her budget for San Francisco workers in 1917, speaks of the "typical worker";²⁵ the budget awarded the men in the Seattle and Tacoma Street Railway Arbitration of 1917 was based on a study of family budgets among skilled workers;²⁶ the minimum comfort budget suggested to the National War Labor Board by Professor Ogburn in 1918 was reached by "a study of the workers in the ship yards in the New York District who receive the higher incomes."²⁷

Thus the new standard, put forward in 1917 and known variously as the minimum of comfort budget²⁸ or the minimum standard of wholesome living²⁹ or the standard of health and decency,³⁰ was based on the needs and expenditures not of the lowest grade workers whose living conditions were satisfactory, but of the higher grade, skilled workers. Objective tests of sufficiency of food, housing, clothing, and other items, which figured so largely in establishing the minimum standard in the earlier budgets, were less applicable to the more liberal standard and such subjective considerations as the investigator's opinions of adequacy were often the determining factors in developing content and cost. Such budgets are not representative of a minimum standard in the sense of indicating a level below which no American family should fall; rather they picture an ideal average standard, below which the minimum must fall and above which there will inevitably be a smaller margin than is the case with the true minimum.³¹

Another tendency observable in connection with the employment of family budgets as a measure of the cost of living in wage arbitrations has been the indiscriminate application of budgets collected in one locality for one purpose, as a measure of the standard or cost of living in another.

²⁵ *Memorandum on the Minimum Wage and Increased Cost of Living, op. cit.*, p. 47.

²⁶ *Ibid.*, p. 14.

²⁷ *Ibid.*, p. 14.

²⁸ Bureau of Applied Economics, Inc., *op. cit.*, p. 97.

²⁹ *Ibid.*, p. 115.

³⁰ *Ibid.*, p. 27.

³¹ In presenting the demands of the anthracite miners, while the living wage was placed at \$2,242 annually, the rate demanded for the lowest grade unskilled worker was \$6 a day, which, assuming the maximum days of employment in the industry, would amount to only \$1,836 a year. *Summary, Analysis and Statement, op. cit.*, p. 18. Professor Ogburn wrote in 1917, in explaining the minimum comfort budget he prepared for the wage arbitration of Seattle and Tacoma Street Railway employees, that lower differentials could be worked out from the maximum hourly rate his minimum comfort budget required. *Memorandum on the Minimum Wage and Increased Cost of Living, op. cit.*, p. 19.

Referring again to the anthracite wage arbitration case, evidence was submitted that "the amounts absolutely necessary for the maintenance of an average family of five persons *on a bare subsistence level* of physical needs only (food, fuel, clothing and shelter), when brought up to May 1, 1920, show the need of an annual earning or income amounting to \$1,772."³² This sum was reached by taking ten estimates of the minimum cost of living, made at various dates from 1905 to 1919, calculating what had been the probable increase in cost between each of these dates and May 1, 1920, and finding the cost of each on this common date. These sums were then averaged and found to have been \$1,772.54, which was said to represent the cost of bare subsistence in the anthracite region in May, 1920.

In similar fashion the cost of six so-called minimum comfort budgets were brought to a common date, averaged, and made to serve as the basis for the statement that "the amount necessary in industrial localities to maintain an average family on the basis of a minimum standard of health, and with a reasonable or small degree of comfort, on the basis of prices in May, 1920 . . . is an average annual wage or earning capacity of \$2,242."³³

Study of this method of determining the cost of living reveals the possibilities of error to have been several. The first and most important is that six of the so-called subsistence budgets were made in or were based upon studies made in the city of New York where living conditions are different from those in any other section of the country. A comparison of the results obtained in three separate investigations made at the same time by identical methods illustrates how different is the cost of living in New York from that in a city so nearby as Buffalo.³⁴

<i>Investigation</i>	<i>New York City</i>	<i>Buffalo</i>
For the New York State Conference of Charities and Corrections, 1907—		
By R. C. Chapin	\$825.00 ¹
By John R. Howard, Jr.	\$675.00 ¹
For the New York State Factory Investigating Commission, 1914—		
By Frank H. Streightoff	876.43	772.43
By the United States Bureau of Labor Statistics, 1918	1525.66	1460.00

¹ Families in Buffalo averaged six persons as against five in New York City.

³² *Summary, Analysis and Statement, op. cit.*, p. 17. Italics appear in the original.

³³ *Ibid.*, p. 17.

³⁴ Chapin, *op. cit.*, pp. 281, 316; *Report of the Factory Investigating Commission, op. cit.*, p. 1668; *Monthly Labor Review*, May, 1919, pp. 152 and 158.

The cost of living in Scranton, the only city in the anthracite region where figures were collected by the United States Bureau of Labor Statistics in 1918, averaged \$1,344.99 for a family of 5.2 persons as against \$1,525.66 in New York City for a family of 4.9 persons and \$1,460 in Buffalo for a family of 4.6 persons. In the 92 localities where the study was made, costs varied all the way from \$1,167.12 for an average family of 4.9 persons in Chippewa Falls, Wis., to \$1,919.40 for a family of five persons in Bisbee, Ariz. The average of 12,096 white families was \$1,434.36.³⁵

With so great a difference in the actual cost of living in different places it is plain that not even a rough approximation can be made for any given locality without a special study. When, moreover, the cost in the community where the study was made is based on expenditures of families who were selected to come within a definite income group, as is frequently the case, the danger of not reflecting prevailing conditions is even greater.³⁶

Although increases in the cost of living within the last few years have probably been more uniform in different communities than is the actual cost of living at any given time, these also have varied greatly. According to figures collected by the United States Bureau of Labor Statistics in June, 1920, the cost of living for the country as a whole had increased 110.2 per cent above the level of December, 1914.³⁷ In the city of Detroit, however, this increase was reported to have averaged 136 per cent within the same period, whereas in San Francisco it was only 96 per cent.³⁸ With such a difference in price changes in different cities, it is obvious that any general estimate of increase in the cost of living applied unguardedly to specific localities may give a very erroneous picture of the actual cost of living.

Recent family budget investigations have aimed to establish a so-called quantity budget which would not depend on prices, but would specify amounts, grades, and qualities. It was thought that this would be a convenient measure of the standard of living which could be priced from time to time to obtain comparative costs.³⁹ The best known of

³⁵ *Monthly Labor Review*, May, June, July and August, 1919.

³⁶ Chapin, for example, studied particularly families whose cost of living averaged between \$600 and \$1100 a year; the families studied by the Philadelphia Bureau of Municipal Research in 1917 were chosen so as to exclude those where the principal bread-winner earned more than \$2,000 annually. Other studies in which families were selected on the basis of income were those by the United States Bureau of Labor for the country as a whole in 1901 and for the District of Columbia in 1916; by Howard in Buffalo in 1907; by Streightoff for the New York State Factory Investigating Commission in 1914.

³⁷ *Monthly Labor Review*, Oct., 1920, p. 65.

³⁸ *Ibid.*, September, 1920, pp. 76-80.

these is that worked out for the family of a government employee in the city of Washington. In the wage arbitrations of 1920, this budget was frequently quoted, and it was argued that "what is a standard of health and decency for families of government employees should, in its main outlines, also be the standard of health and decency for families of mine workers."⁴⁰ Difficulties have arisen in pricing the items in this budget in other localities, however. In certain bituminous mining towns of Pennsylvania and Illinois "it was impossible to price a particular article in the community" and "prices furnished by the Bureau of Labor Statistics from other places were used."⁴¹ In the wage arbitration between the Boston Elevated Railway Company and its employees in the spring of 1920, certain budgets were criticized by the men because they did not meet the requirements of the Washington budget. The former admittedly reflected local conditions, but since they failed to meet the Washington standard, even though the latter could not possibly be realized in the communities under consideration because facilities for doing so did not exist, they were rejected by the men as inadequate.⁴²

Obviously there is a great difference between budgets which aim to portray the lowest standard at which American workingmen's families can be expected to live and a standard which it would be ideal for average families to attain. The first, represented by budgetary studies made before 1917 and by the National Industrial Conference Board in 1919 and 1920, have been based on conditions actually prevailing in a specified locality. They were not intended for use in any community other than that in which they were collected. They were in no sense ideal but aimed rather to represent the lowest fair standard of living that could be expected for workingmen's families under existing local conditions. The minimum of comfort or the health and decency budgets, on the other hand, while often based on the expenditures of some families somewhere were frequently those of high grade skilled workers whose standard of living was considerably above what could be considered a fair minimum. They took into account not so much conditions actually prevailing as those which might be found under ideal conditions. They did not, therefore, measure the cost of living but only what would be the cost were it possible to obtain locally all of the items in the budgets which were deemed essential.

³⁹ United States Bureau of Labor Statistics, *Tentative Quantity and Cost Budget Necessary to Maintain a Family of Five in Washington, D. C., at a Level of Health and Decency*, 1919; Bureau of Municipal Research of Philadelphia, *op. cit.*,

⁴⁰ Bureau of Applied Economics, Inc., *op. cit.*, p. 48.

⁴¹ *Ibid.*, p. 57.

⁴² Boston Elevated Railway Company Arbitration, May 3, 1920, *Stenographic Transcript*, vol. 4, pp. 257 ff.

This difference between the two sets of budgets has not always been kept in mind and confusion has resulted. The anthracite mine operators, for example, brought out in the testimony that housing such as was specified in the budgets presented to them as a measure of the cost of living of their employees was not typical of the localities they were interested in. The Boston Elevated Railway Company knew that, although the representative of their men stated his belief that a man earning less than 75 cents an hour for an eight-hour day did not have a subsistence wage, there were thousands of men in the city of Boston who were supporting their families decently on this or less.

Such circumstances as these have tended to cause a questioning of budgetary studies as a measure of the cost of living and to call attention to the necessity for an investigation of budget standards in order that they may either become practical tools rather than theoretical concepts or that they may be abandoned entirely for the purpose of wage adjustments.

The Type Family

A less obvious but equally serious problem connected with establishing standards in family budgets for use in wage arbitrations involves the question of the type family to whom this budget shall apply. Of how many members is it composed? What are their ages? To what extent can they be counted on as a source of income?

As already noted, it has been customary to assume in measuring the cost of living that the type family consists of five persons. Rowntree used this unit in his study of York, England, because the British census of 1901 showed average families to number four and a fraction persons.⁴³ Mrs. More followed Rowntree's example in estimating the minimum cost of living in New York City, although the size of the families whose cost of living she studied actually averaged somewhat larger.⁴⁴ Kennedy estimated the cost of living for five but also included estimates for larger families.⁴⁵ Chapin carefully selected the families he studied so that they would average five.⁴⁶ Later budgets were constructed to meet the needs of families of this size and, in addition, ages and composition were often arbitrarily assigned.

The selection of families having certain attributes in common is, of course, essential for any comparative study of family budgets. It is equally essential for practical purposes that, so far as possible, the attributes selected should most fairly represent prevailing conditions.

⁴³ Rowntree, *op. cit.*, pp. 28, 81.

⁴⁴ More, *op. cit.*, pp. 267, 269.

⁴⁵ Kennedy, *op. cit.*, pp. 77 ff.

⁴⁶ Chapin, *op. cit.*, p. 37.

As Professor Giddings said in his introduction to Mrs. More's book, "Nothing is easier than to choose from a given population so many hundreds or so many thousands of individuals or of families whose circumstances duly set down in arithmetical terms shall constitute a picture of economic life thoroughly biased and misleading."⁴⁷

The family of five, consisting of father, mother, and three children under 14 years of age where the father is the only wage-earner, has come to be accepted as the "typical" or "normal" American wage-earner's family. The reasons for this are said to be: (1) this is the average size of the American family; (2) it is necessary for the perpetuation of the race that marriage be universal and that three children survive.⁴⁸

Careful study of available data, assembled both in budgetary investigations and from other sources indicates how confused is the evidence on the validity of this family as the standard unit. This evidence may be noted as follows:

1. The census of 1910 shows that all families in the United States at that time averaged 4.5 persons per family.

2. Studies of wage-earners' families where they have not been selected to produce this size, show the average to be about five persons.

3. Where wage-earners' families average five or more persons the children are not all under 14 years of age, and, conversely,

4. Where families are chosen so as to include only children under 14 years of age, they average fewer than five persons to a family.

5. Among families unselected as to size or income there are usually other sources of income than the earnings of the head of the family.

6. A number of studies of family budgets have been of families selected so as to conform to certain requirements as to size, composition, and income.

The United States census defines family as follows: "A household or group of persons, whether related by blood or not, who share a common abode, usually also sharing the same table. If one person lives alone, he constitutes a family, while on the other hand those who dwell in a hotel or institution in which many people live are also treated as forming a single family." Lest it be thought that so wide a variety of family types would produce an average having little significance, it is pointed out that the average of these families and the average of so-called "private families" differ so little from each other as to make the average of all families in reality the representative American type.⁴⁹

⁴⁷ More, *op. cit.*, p. iv.

⁴⁸ Interchurch World Movement Commission of Inquiry, *Report on the Steel Strike of 1919*, p. 255.

⁴⁹ United States Thirteenth Census (1910), *Abstract*, p. 259.

This family, however, includes not only fathers, mothers, and children but also other relatives, boarders, lodgers, and servants; and no data are available in the census to determine the distribution by age of the component members.

Among wage-earners' families, specifically, the average number of members is probably not far from five persons. Data on this point are available from several investigations where families were unselected. Thus, among the 25,440 families whose budgets were collected by the United States Bureau of Labor in 1901, the average number of persons per family was 4.88; Mrs. More's families in New York City in 1905 averaged 5.6; Howard's families in Buffalo in 1907 averaged 6; Miss Byington's families in Homestead in 1908 averaged 5; the cotton-mill families studied by the United States Bureau of Labor in 1908 averaged 8.5 persons in the South and 6.8 persons in Fall River; the British Board of Trade found the average in the United States in 1909 to be 4.9 persons; Kennedy found among the families of stockyard workers in Chicago in 1911 an average of 7.25 persons; among families in the District of Columbia in 1916, there were 4.9 persons per family; among Kensington mill workers in Philadelphia in 1913, the average was 5.2 persons; in Dallas, in 1917, the average was 4.08; in Philadelphia in 1918 it was 5.57.⁵⁰ In these families also, there were boarders, lodgers, servants, other relatives, etc., as well as parents and children both under 14 years of age and over.

In only one of these studies is it possible to separate families with children under 14 years of age and no boarders or lodgers or servants from all families. This is the investigation by the United States Bureau of Labor in 1901. As a part of that study certain families were chosen for comparative analysis. They were called "normal" and consisted of a father at work, a mother, not more than five children and none over 14 years of age and no boarders, lodgers or servants. These families numbered 11,156 or 44 per cent of all families from whom information was secured. Their average size was 3.96 persons as against 4.88 among all families; their average annual cost of living per person was \$157.13 as against \$143.29 per person among all families, although the ages in the latter necessarily averaged somewhat older.

⁵⁰ Many data from other than budgetary sources are also available to indicate the average size of wage-earners' families. Thus, for example, among 2,421 families of cotton mill workers studied in 1908, the average number of persons per family was 6.6 with an average of 3.7 wage-earners each; among 827 silk mill workers' families, the average number was 5.5 per family with 3 wage-earners each; among 2,137 glass workers' families, the average size was 6.3 persons with 3 wage-earners each; among 2274 garment workers' families the average size was 5.4 persons with 2.9 wage-earners each. *Report on Condition of Woman and Child Wage-Earners*, op. cit., vol. I, p. 414; vol. IV, p. 227; vol. III, p. 517; vol. II, p. 349.

Figures collected recently by the Metropolitan Life Insurance Company from among their industrial policy holders, most of whom are wage-earners, afford evidence that among families having several children, only a small proportion of the children will at any time average less than 16 years of age. A study was made of 663 families where deaths occurred in July and August, 1920. In these families, there was an average of 2.4 children. Of these, 34 per cent were under 16 years of age. In 24 per cent of the families there were no children at all; in 37 per cent there were children under 16 years of age and in the remaining 39 per cent, all of the children were 16 years of age or over.⁵¹

Another method of determining upon the representativeness of the so-called "normal" family of five persons where the father is the only wage-earner is to ascertain how many wage-earners there are in actual families whose budgets have been studied and what are the sources of income other than the earnings of the father.

Mrs. More wrote on this point:

The popular impression, outside the working class, seems to be that the entire income of the workingman's family is from the earnings of the head of the family. This implies that if the head of the family is an unskilled day laborer, the income of his family is that grade. On the contrary, some of the largest incomes in this study are of this class. The fact is there are comparatively few families of wage-earners who are entirely dependent on the earnings of the head of the family. This may be true in families where there are several young children, and the wife's strength is needed at home, but even then it is surprising how frequently other sources of income are added. . . .

All the larger families having five or more in the family have from one to five children who are adding to the family income. As the children become wage-earners the mother stays at home and does the house-keeping.⁵²

Among the 200 families Mrs. More studied, 63.5 per cent of the average income was derived from earnings of the father; 9.4 per cent from the mother; 11.5 per cent from the children; 9.2 per cent from boarders and lodgers; 6.4 per cent from other sources.

In 1911, Kennedy found that although his families averaged 7.25 persons there was an average of 1.9 boarders per family and the father's earnings amounted to only 54.5 per cent of the average income.

In the District of Columbia in 1916, white families which averaged 4.9 persons with boarders and lodgers averaged only 3.8 without. Fifty-one per cent of the families had income from this source; 11.2 per cent from the mother; 14.5 per cent from children or other relatives; and 46.7 per cent had income from other sources.

⁵¹ Metropolitan Life Insurance Company, *Statistical Bulletin*, October, 1920, p. 4.

⁵² More, *op. cit.*, p. 83-87.

Among the families studied by the Bureau of Municipal Research in Philadelphia in 1917, of which the average size was 5.57 persons and where only families were studied in which there was a man at work, 5.9 per cent of the total average income was derived from boarders and lodgers which were kept by 34.6 per cent of all families; 19.6 per cent of the families had income from earnings of the children; 11.5 per cent from the mother and 34.6 from other sources. The father contributed 84.8 per cent of the average income.

The study by the British Board of Trade in the United States in 1909 showed that among the group of 1,036 families averaging 4.54 persons per family, 4.2 per cent of the income came from children 16 years of age and over; among the 545 families averaging 5.02 persons per family, 11 per cent of the family income was derived from children 16 years and over. The percentage of the income contributed by the father decreased steadily with an increase in income, being 93.2 per cent among families having the smallest incomes and 44.4 per cent among families having the largest incomes.

Streightoff found in his study for the New York State Factory Investigating Commission in 1914 that, while families averaged about five persons, the number of wage-earners averaged about three.

Among the very large cotton mill families noted above, there were 1.5 boarders and 3.6 wage-earners per family in the South and .6 boarders and 3.2 wage-earners per family in Fall River.

All of this seems to indicate that where families average five or more persons there are likely to be children in the family over 14 years of age and there are also likely to be other sources of income than the father's earnings.⁵³

A further complicating element regarding size and composition of the family is introduced in budgetary studies by the custom of counting as children only those who do not work or who, if employed, turn all of their earnings into the family fund. Children who merely pay a fixed sum a week into the family purse are listed as boarders. Where, as has been the case with some investigations, families have been chosen specifically to exclude children over 14 or over 16 years of age or families with boarders and lodgers, the presence of older children in the family would not appear at all.

For this reason, conclusions reached by such investigations as Chapin's or that by the United States Bureau of Labor Statistics in 1918 are not representative. Chapin's families were chosen to include only

⁵³ The evidence of this point is very extensive but is developed only incidentally in the present paper since it is important in the establishing of wage rates from the income side of the problem rather than in connection with the cost of living. See, for example, Lauck and Sydenstricker, *op. cit.*, pp. 253 ff.; pp. 357 ff.

those having not less than two or more than four children under 16 years of age. One hundred six schedules or one sixth of all collected were discarded because the families numbered less than four or more than six persons.⁵⁴ The fact, therefore, that his average family was five is not a measure of the size of wage-earners' families, since the component parts of the average were selected to produce that result.

The instructions to agents in the federal investigation of 1918 were as follows, regarding the selection of families to be scheduled:

1. The family must be that of a wage-earner or salaried worker, but not of a person in business for himself. The families taken should represent proportionally the wage-earners and the low or medium salaried families of the locality.

2. The family must have as a minimum a husband and wife and at least one child who is not a boarder or lodger.

3. The family must have kept house in the locality for the entire year covered.

4. At least 75 per cent of the family income must come from the principal breadwinner or others who contribute all earnings to family fund.

5. All items of income or expenditure of members other than those living as lodgers must be obtainable.

6. The family may not have boarders nor over three lodgers either outsiders or children living as such.

7. The family must have no subrental other than furnished rooms for lodgers.

8. Slum or charity families or non-English speaking families who have been less than five years in the United States should not be taken.

Requirement 6 has been construed not to refer to or include relatives, servants, nurses, etc., temporarily in the home, who were furnished board free.⁵⁵

In gathering the schedules in this investigation by the United States Bureau of Labor Statistics, emphasis is said to have been laid on the selection of families of five; and the fact that the final average was 4.9 persons apparently has little significance as a measure of the size of average American wage-earners' families.⁵⁶

The conclusion to be reached from the federal investigation of 1901 is thus apparently verified by the results of other studies. This is that families where the father's earnings are the only source of income and all children are under 14 years of age tend to average considerably less than half of all wage-earners' families. To this extent, they are unrepresentative. Such families seem to be unrepresentative also in

⁵⁴ Chapin, *op. cit.*, pp. 28; 37.

⁵⁵ *Monthly Labor Review*, May, 1919, p. 147.

⁵⁶ The fact that 4.9 was the average number of persons per family studied in this investigation was "the determining factor in selecting the standard family" as a measure of the cost of living for a government employee in Washington in 1919. *Tentative Quantity and Cost Budget*, *op. cit.*, p. 7.

their cost of living, since even though they average fewer adults, their per capita cost of living tends to be greater than the average among all families. It appears, further, that families where all children are under 14 years of age average fewer than four persons, and that where the average is nearer five there are other members of the family in addition to the children under 14 and their parents. The average American wage-earner's family income is, therefore, to a large extent composite, and is derived from earnings of the wife and children and from the keeping of boarders and lodgers as well as from the wages of the husband.

While this paper is concerned primarily with expenditures and the standards by which they are to be measured, the use of budgetary studies in wage adjustments calls to attention certain factors regarding sources of the income by which these standards are to be maintained.

The adoption of the family of five, in which all children are under 14 years of age and the father's earnings are the only source of income as the unit of measurement for expenditures, necessarily implies that the father's wage shall be sufficient to meet the cost of maintaining what has been established as a fair minimum standard of living. Professor Peixotto, in making her estimate of the cost of living for Pacific Coast workers in 1917, stated that in case a man who was the head of a family consisting of himself, a wife, and three children of school age were not receiving in wages what she believed to be necessary, one of three things, any one of them harmful for the group and for the community, is likely to happen:

1. Other members of the family will have to work to eke out the income; or
2. There will be less food than is necessary for the men to do efficient work. The risks of ill health to all members of the group and the consequent costs to the group and to the society are equally plain; or
3. The group must go without many of the articles noted under Sundries and House Operations.⁵⁷

In the anthracite wage arbitration it was frequently claimed that insufficient wages of the miners was forcing the employment of children and filling their homes with boarders and lodgers.⁵⁸ There is in most American states, however, little opportunity for the employment of children under 14 years of age at the present time. If by "children" is meant those 14 or over, the family immediately steps out of the so-called "normal" class, and the question arises: At what age may children go to work without this being considered an evidence of poverty? Sixteen is the age usually set as the limit below which legal per-

⁵⁷ Bureau of Applied Economics, Inc., *op. cit.*, p. 115-116.

⁵⁸ See, for example, *Summary, Analysis and Statement, op. cit.*, pp. 19, 20.

mission is required for employment. This is in order to safeguard health and education, but it offers no criterion as to economic status. The United States and some of the states having income taxes allow exemptions for the support of children up to the age of 18 years. On the other hand, such studies as have been made of the conditions under which children leave school to go to work indicate that other factors than poverty are important in starting the industrial career of children between 14 and 16 years of age.⁵⁹

Establishing the conditions under which the employment of married women is socially desirable and when it is to be condemned is as difficult as suggesting economic standards for the employment of children. One of the most interesting studies which could be made would be one which would throw light on the effect, as regards the employment of women and children, of increased wages during the period from 1914 to 1920. In many industries there is no doubt but that wage rates and weekly earnings advanced far beyond the increase in the cost of living. Was the result of the greatly increased earnings of adults, especially adult males, to keep the children in school longer and to reduce the number of married women employed? Common observation suggests that the opposite was the case, but no careful investigation of the subject has as yet been made.

Or, again, the question may be raised: When is a family justified and when is it to be censured for taking boarders or lodgers? Obviously such conditions as those revealed by the Immigration Commission,⁶⁰ and other studies showing the "boarding boss" system in all its evils, are to be disapproved from any point of view. The British Board of Trade, on the other hand, noted in its study of the budgets of American wage-earners' families:

About one third of those thus reckoned [as boarders] were in fact older children, as to whose earnings particulars were not furnished, but instead the amount paid into the family purse as boarders. The purchase of the house by the tenant, especially in certain towns, and the charges on incomings thus incurred, explain the presence of boarders in many cases, whilst in others boarders perhaps merely supply the means of occupying larger and more comfortable premises.⁶¹

From what has been said, it must be apparent that there is, at the

⁵⁹ *Report on Condition of Woman and Child Wage-Earners in the United States*, op. cit., vol. VII, p. 46; *Report of the Factory Investigating Commission*, op. cit., p. 1485; More, op. cit., p. 87; *Monthly Labor Review*, Jan., 1921, p. 47; Anna Y. Reed, *Junior Wage Earners*, pp. 11-12.

⁶⁰ United States. Immigration Commission, *Abstracts of Reports*, vol. 1, pp. 422 ff. (61 Cong., 3 Sess., S. Doc. No. 747, 1911).

⁶¹ *British Board of Trade Report on the Cost of Living in American Towns*, op. cit., p. xlviii.

present time, a deal of confusion in the interpretation and use of budgetary studies of the standard and cost of living. The results of investigations made in one locality for one purpose have been used in other localities for totally different purposes with little or no effort to verify their adaptability. Circumstances which exist only in theory have been presented as if they were fact, and conditions actually existing have been disregarded, because they did not conform to theoretical considerations. Such a situation has tended to discredit in the popular mind the whole method of measuring the cost of living by budgetary units.

Summary

In the present paper an attempt has been made to show that:

1. The extensive use of family budgets as a basis for establishing wages is a new thing in this country and the attempts to adapt for this purpose budgets collected a number of years ago for a very different purpose is putting them to a use which raises a number of serious questions.

2. The rejection of hitherto accepted budgets as a measure of a fair minimum standard of living and attempts to establish in their place a new standard based on the needs of the higher grade and skilled workmen points out the need for careful study of the exact basis on which a minimum standard of living should be predicated.

3. Attempts to measure the cost of living in one community by standards developed for another which, in fact, do not exist in the first, and failure to take into account prevailing local conditions have brought into question the entire principle of the family budget as a measure of the standard and cost of living.

4. The family of five where the father is the only wage-earner and all children are under 14 years of age, which has been selected as the normal or typical family, is apparently not most representative of American wage-earners, since in families where the father is the only wage-earner and all children are under 14 years of age the average size is smaller than this, while in families having five members there is an average of more than one wage-earner.

5. The fact that family budgets have recently been so frequently used in the determination of wage rates without sufficient regard for their applicability, and their obvious divergence from conditions actually prevailing has cast such serious discredit on them as to require a careful study of the possibility of establishing new standards in accord with the facts or of devising some other means of measuring the cost of living.

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